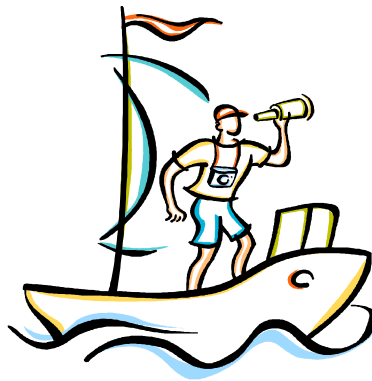


Sailing Into Your Future

(ND Department of Career and Technical Education - 2011)

This activity book is intended to help ND Middle School Students do the following:

- ◆ ***Assess*** – *their interests, personality traits, skills, learning styles; and learn more about what is important to them.*
- ◆ ***Explore***- *the changing world of work, occupations of interest, career clusters, cool jobs in technology and how to get there.*
- ◆ ***Plan*** – *by learning how to set and reach goals, make a \$budget, and more.*



SAILING INTO YOUR FUTURE and the TEACHER'S GUIDE may be viewed and/or downloaded on-line at:
www.nd.gov/cte/programs/career-dev/lesson-plans.html

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KEYS TO SUCCESS

Appearance

- first impressions last a long time

Attitude

- is learned behavior, make it positive

Friendliness

- be generous, give smiles freely

Impressions

- is what is left in the room after I leave

Response-Ability

- take action
- give more than the customer expects

Commitment

- my pledge to service and teamwork

Team Thinking

- my actions affect everyone in my group

Communication

- careful listening and positive talk

Service

- my personal pledge to make a difference

Personal Excellence

- I believe in my ability to make a difference



Sail Into Your Future, Chart It Now!

Life is a journey filled with many twists and turns. While the journey can be exciting, it is a good idea to know where you are going so you can decide how to get there. Career development is all about getting the knowledge and skills you need to make more informed and better career decisions. **Now** is an excellent time to begin developing skills that will help you manage your career throughout your lifetime. The following steps can get you started down a pathway for a lifetime of choices:

1. WHO ARE YOU?

- A. Identify and learn about your interests, learning and study styles, and what you like and dislike.
- B. Study your personality type and see how it fits with other personalities, and different work places.
- C. Understanding your values can also help you decide where to work and what kind of work will “fit” for you.
- D. Don’t forget skills; the ones you develop in school and those you continue to develop past high school, are critical to your future occupation.

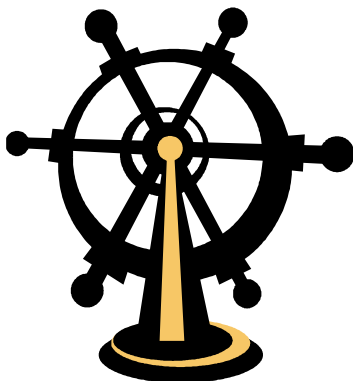
2. WHERE ARE YOU HEADING?

- A. Learn about the occupations; find out which occupations are in demand, and how technology will affect jobs of the future.
- B. Explore occupations and learn how they connect to your interests and abilities.
- C. Learn about education and training choices beyond high school and how financial aid can be used to help pay for your education/training.

3. HOW WILL YOU REACH YOUR GOALS?

- A. Identify the careers and career cluster area that you find most interesting.
- B. Set short-term and long-term goals.
- C. Select a major area of interest and study, to assist in planning coursework for high school.
- D. Develop a high school program of study.

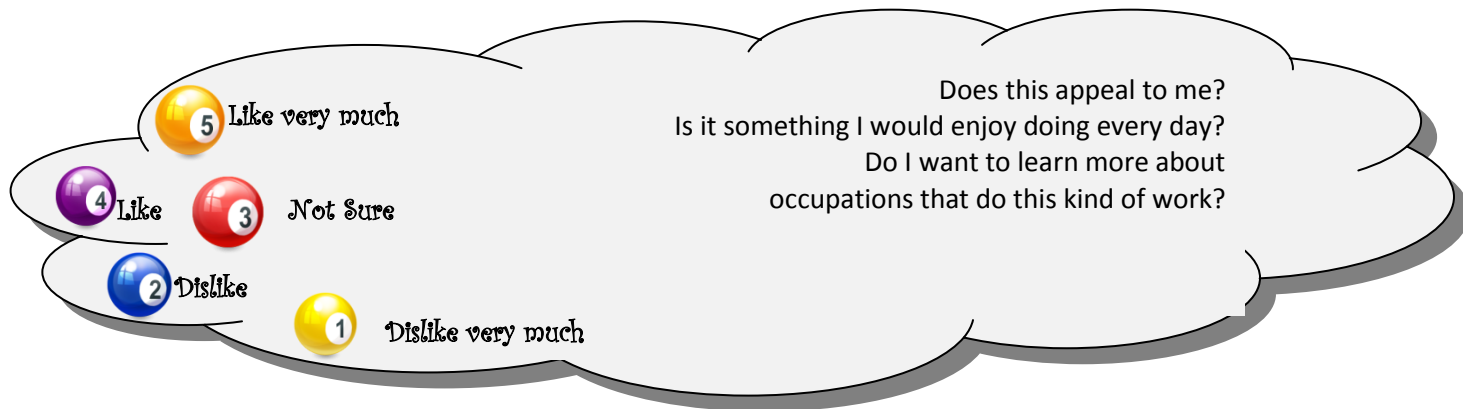
Sail Into Your Future, Career Outlook, and **North Dakota RUREADY** (www.RUReadynd.com) can get you started as you explore career options and navigate toward your future.



What's Your Passion?



Have you discovered what you are passionate about and how that might affect your choice of a career? This activity will help you think about work related tasks and where your interests are today. As you continue to experience life and work place opportunities offered through your school years, your interests will grow and change. Listed below are examples of work tasks. Look at each task and ask yourself:



As you explore career clusters, activities like this will help you narrow down your choices so that you use time exploring occupations that match your interests, and other personal characteristics.

To find your top interest use the 1-5 scale, explained above, to mark each set of activities.

1

- _____ Research new ways to produce food
- _____ Care for animals
- _____ Set up traps to catch crabs and lobster
- _____ Manage a farm
- _____ Maintain planted areas of trees, flowers or shrubs

Total

2

- _____ Design, build, or remodel homes
- _____ Survey roads, property lines, and bridges
- _____ Build roads or bridges
- _____ Install electrical wiring in a building
- _____ Install plumbing and bathroom pipes and fixtures

Total

3

- _____ Write stories or plays
- _____ Broadcast programs on TV or radio
- _____ Design a webpage
- _____ Play in a band, orchestra, or music group
- _____ Operate equipment used in radio and TV

Total

4

- _____ Type or write reports
- _____ Do tax records for people or companies
- _____ Manage a store
- _____ Work with computers
- _____ Answer the telephone and greet customers

Total

5

- _____ Teach students to read
- _____ Take care of young children
- _____ Research test information
- _____ Be an athletic trainer
- _____ Coach a team

Total

6

- _____ Keep track of money
- _____ Sell insurance to people
- _____ Manage a department in a bank
- _____ Keep records of how money is spent and received.
- _____ Help people invest their money

Total

7

- _____ Plan a skate park
- _____ Direct a welfare agency
- _____ Participate in fund raisers
- _____ Make rules to protect the environment
- _____ Write laws for legislators to vote on

Total

8

- _____ Examine people and give them medical treatment
- _____ Give first aid to patients in an ambulance
- _____ Help an injured person learn to walk again
- _____ Deal with medical records and mail
- _____ Read an X-ray

Total

9

- _____ Take groups of people on tours
- _____ Serve meals and beverages to people
- _____ Umpire or referee a sporting event
- _____ Plan and do activities and trips for tourists
- _____ Manage a hotel

Total

10

- _____ Counsel people in hospitals, clinics, or schools
- _____ Help youth, couples, and families solve conflict
- _____ Advise people about healthy diet needs
- _____ Hold classes to teach people how to be good parents
- _____ Plan activities for community centers

Total

11

- _____ Follow blueprints to inspect electronic equipment
- _____ Use computers to create reports
- _____ Repair computers
- _____ Design programs for computers
- _____ Write technical directions for DVR'S (digital video recorders)

Total

12

- _____ Protect lives and/or property from danger
- _____ Uncover details of a crime and arrest suspects
- _____ Study legal documents to find information
- _____ Guard money or valuables in an armored car
- _____ Defend someone in court and advise them about laws

Total

13

- _____ Use small or large power tools to build or repair items
- _____ Use devices to make parts
- _____ Use machines to shape, cut, or mold metal, fabric or wood
- _____ Install electrical equipment
- _____ Build robots

Total

14

- _____ Buy clothing for a department store
- _____ Sell advertising space for a magazine
- _____ Try new beauty treatments for hair, face, or nails
- _____ Run your own business on the Internet
- _____ Sell houses or land

Total

15

- _____ Do experiments in a lab
- _____ Find alternate power sources
- _____ Use advanced math to solve problems
- _____ Study causes of animal diseases
- _____ Study space and the solar system

Total

16

- _____ Drive a truck to deliver products
- _____ Pilot a ship or airplane
- _____ Drive a bus or taxi
- _____ Operate a train
- _____ Manage a warehouse

Total

Now total your score in each set of questions. Then play the match game on the next page and find the career clusters that match the number on the checklist where you scored the highest!

Check Out Your Career Clusters

Clusters include careers that are grouped together because they have some things in common. The careers may share similar job duties, skills, and/or areas of industry.

_____1. Agriculture, Food & Natural Resources

Making, delivering, and selling things like grain, Christmas trees, etc.

_____2. Architecture & Construction

Designing, building, maintaining, and managing anything that is built.

_____3. Arts, A/V Technology & Communications

Making, showing, performing, and publishing; using creative talents.

_____4. Business, Management & Administration

Working with businesses to make sure the company is making money.

_____5. Education & Training

Provide education and training to all ages of people; in many different settings.

_____6. Finance

Planning the way money is spent; may involve banking, insurance, finances and investments.

_____7. Government & Public Administration

Making sure government rules and regulations are followed.

_____8. Health Science

Providing all kinds of medical services and information about health.

_____9. Hospitality & Tourism

Managing cafes, motels, tourist spots, recreation events, and travel services.

_____10. Human Services

Providing for families and helping people in need.

_____11. Information Technology Designing, supporting, and managing computer hardware, software, multimedia, and making the systems work together.

_____12. Law, Public Safety, Corrections & Security

Providing police , legal information, and/or terrorist security services.

_____13. Manufacturing

Making raw materials into products.

_____14. Marketing, Sales & Service

Performing activities to reach sales goals.

_____15. Science, Technology, Engineering & Mathematics

Performing scientific research; using science, technology, and/or math to solve problems.

_____16. Transportation, Distribution & Logistics

Managing or moving anything by road, pipeline, air, rail, and/or water.

Total up your scores from boxes 1-16 on pages 4 and 5, and match them to the like numbered Career Clusters on this page.

List your top three Career Clusters.

- 1.
- 2.
- 3.

For additional career cluster information see pages 29-45.

Discover the “U” in Values

This activity will help you identify your personal traits or values. Your journey through life will offer a variety of experiences, so as you change and grow, your values may change as well. The list below contains a variety of satisfactions that people get from the activities they do. Using the scale listed below, rate the degree of importance to you, for each item.

1 = Not Important At All

2 = Somewhat Important

3 = Very Important

- _____ **Helping Society:** Doing something that helps to improve our world.
- _____ **Helping Others:** Being involved in helping other people in a direct way.
- _____ **Competition:** Doing activities that test my abilities against others.
- _____ **Creativity:** Coming up with new ideas and programs and new ways to do things.
- _____ **Artistic Creativity:** Taking part in creative activities such as painting, writing, or acting.
- _____ **Knowledge:** Learning and understanding new things.
- _____ **Having Power and Authority:** Controlling or influencing others.
- _____ **Public Contact:** Having a lot of day-to-day contact with others.
- _____ **Working Alone:** Doing projects alone without much contact with others.
- _____ **Religious:** Being part of activities related to personal faith.
- _____ **Recognition:** Being recognized for the things I do in a public way.
- _____ **Physical Challenge:** Doing activities that will require strength, speed, or coordination.
- _____ **Excitement:** Doing stimulating and exciting work.
- _____ **Intellectual Status:** Being thought of as very smart or an “expert.”
- _____ **Change and Variety:** Having job duties that change often.
- _____ **Stability:** Having routine and a certain way of doing things, in my activities.
- _____ **Profit-Gain:** Making lots of money.
- _____ **Fun:** Liking what I do.
- _____ **Working with Others:** Working with others toward common goals.
- _____ **Adventure:** Doing risk-taking activities. (any extreme sport or other “dangerous” activity)
- _____ **Independence:** Being my own boss.
- _____ **Technology:** Working well with machines and tools.

Now look through the completed list for the items you’ve marked as a **3 (Very important)**, pick the five of those items that are most important to you. List your top five values:

1.	
2.	
3.	
4.	
5.	

Personality Rocks!

What do you know about personality types? Think about it this way . . . we all come in different shapes and sizes; we all have strengths and weaknesses, right? Things that are important to you may not be as important to others. Because we have these differences; learning about your personality – may help to develop and improve relationships at home, school, and the workplace.

A great idea! Also....

Getting a clue to your own personality can help you right now - to do better in team or group activities, form friendships, and help you select the correct courses for future career options. And later on, knowing about your personality and other personality types will come in handy in working with all different kinds of people.

The quiz below will give you a glimpse of your personality by looking at common work tasks and environments. One personality type is not better or worse than the other – they are just different. As you compare the group of phrases under each question, you will probably find that sometimes descriptions on each side describe you - that's OK! Just make a decision and check the line by the item on the left OR right that **BEST** describes you **MOST** of the time.

1. How does your energy flow?

Extroverts (E)

- ☐ Have a lot of energy
- ☐ Like to be around people
- ☐ Act now, think later
- ☐ Like doing many things at the same time
- ☐ Talk more than listen

Introverts (I)

- ☐ Have quiet energy
- ☐ Like to be alone
- ☐ Think first, and then act
- ☐ Do one thing at a time
- ☐ Listen more than talk

Every person has two faces. The Extrovert likes the outer world where you seek being with people who like discussions, brainstorming, group exercises, projects, and presentations. The other, the Introvert, likes the inner world of thoughts, interests, ideas, and imagination. Introverts prefer to study by themselves and do activities on their own. Remember, we have characteristics from each type, and one type is not better than the other. However one of the types generally plays the main role in each of our personalities.

Which fits you better? ☐ Extrovert (E) OR ☐ Introvert (I)

2. What kind of information do you notice and remember?

Sensors (S)

- ☐ Like real information
- ☐ Like step-by-step instructions
- ☐ Prefer to stick to the facts
- ☐ Rely on past experiences
- ☐ Like clear and exact information

Intuitives (N)

- ☐ Like creative ideas
- ☐ Like to figure things out
- ☐ Think about the possibilities
- ☐ Trust your gut instincts
- ☐ Like ideas which you can only imagine in your mind

Sensors like to have clear instructions for assignments and tests. Timelines, details, and information are ideal for this type. On the other hand, **Intuitives** love to think big, come up with ideas, and debate the pros and cons of something. They like to do hands-on things and create flow charts to show others the idea.

Which fits you better? ☐ Sensor (S) OR ☐ Intuitive (N)

3. How do you make decisions?

Thinkers (T)

- ☐ Go for honesty and directness
- ☐ Make decisions with your head
- ☐ Love to debate issues
- ☐ Base decisions on facts
- ☐ Look for sensible solutions

Feelers (F)

- ☐ Base decisions on your feelings
- ☐ Consider how other people feel
- ☐ Go for being polite and not hurting others feelings
- ☐ Make decisions with your heart
- ☐ Avoid arguments and conflicts

Thinkers love facts and figures. When making decisions, they first look at logic and doing things in an orderly way. They are great at editing and reviewing the work of others. **Feelers** look at the people and special situations before making decisions. They like to see the value in something and they work well on group projects where people “getting along” is a must!

Which fits you better? ☐ Thinker (T) OR ☐ Feeler (F)

4. How do you relate to your school and the outside world?

Judgers (J)

- ☐ Like to make “to do” lists
- ☐ Have a plan for each day
- ☐ Study first, play later
- ☐ Finish projects that you start
- ☐ Get to class on time

Perceivers (P)

- ☐ Like to stay loose and casual
- ☐ Take each day as it comes
- ☐ Play first, study later
- ☐ Start projects, but don’t finish
- ☐ Like to be fashionably late

Judgers love a highly structured method of learning. They want to see exactly what they are expected to learn, the deadlines, and how they will be graded. **Perceivers** prefer a free-flowing, unstructured learning method. They like to get new information without any timelines.

Which fits you better? ☐ Judger (J) OR ☐ Perceiver (P)

This fun activity is based on “Myers-Briggs type” questions and phrases. Again, all personality types are equal; there is no best type! The point of knowing about personality types is to understand and appreciate differences between people. When you decide which item in each category describes you, you will find your own personality type that can be expressed as a four-letter code. Place the letter below from each category where you marked the most phrases.

Example: E N T J

Your personality type is: 1. _____ 2. _____ 3. _____ 4. _____

For more information, go on-line, and put the letters of your “personality type” into your favorite search engine, like this: **ENTJ occupations** or **ENTJ careers**. Lists of careers that have the code you entered and often “famous people” that have the same code will show up. You may be surprised at how accurately this little exercise may “peg” your personality. As you read about occupations you are considering in www.rureadynd.com, you will find the “Myers-Briggs Personality Types” (for each occupation) when you click on the “Is This For You” button on the left-hand side of the page.

How Do You Learn?

Two sisters were in the same class. Sister 1 noticed Sister 2 always took notes, read her lesson, and made note cards. Sister 1 said, "Why don't you just listen carefully? You could save yourself all that work. That's what I do and you are just as smart as me." This sounded like a great idea! From then on Sister 2 just listened carefully to the lectures; however, when she got her next test back, she had failed it!

While these two sisters were alike in many ways, they had different learning styles. Each of us learns in our own way! Taking the "learning style assessment" may help identify how you learn best.

Understanding your own "style" can also help you realize that other people may approach the same learning situation in a way that's entirely different from your own. If you feel like you have difficulty learning something important, your approach (or method) may not be helping you. You learn and process information in your own special way. Sometimes students think they're dim, dumb, lazy, or crazy because they can't understand assignments the way the others do. When you can match the way you approach information with the way you learn, you will see dramatic improvements.

The following learning style checklist will give you a chance to discover how you learn effectively and how to use that knowledge to your advantage.

Learning Styles Checklist!

Read each statement below and write the appropriate numbered response on each line, as it applies to you.

(1) Seldom/Never

(2) Sometimes

(3) Often

Visual (learn by seeing)

- _____ I remember information better if I write it down.
- _____ Looking at the person helps keep me focused.
- _____ I need a quiet place to get my work done.
- _____ When I read a test question, I can see the corresponding textbook page in my head.
- _____ I need to write down directions, not just take them verbally.
- _____ Music or background noise distracts my attention from the task at hand.
- _____ I do not always get the meaning of a joke.
- _____ I doodle and draw pictures on the margins of my notebook pages.
- _____ I have trouble following lectures.
- _____ I react very strongly to colors.

_____ **Total**

Auditory (learn by listening)

- _____ My papers and notebooks always seem messy.
- _____ When I read, I need to use my index finger to track my place on the line.
- _____ I do not follow written directions well.
- _____ If I hear something, I will remember it.
- _____ Writing has always been difficult for me.
- _____ I often misread words from the text.
- _____ I would rather listen and learn, than read and learn.
- _____ I am not very good at interpreting an individual's body language.
- _____ Pages with small print or poor quality copies are difficult for me to read.
- _____ My eyes tire quickly, even though my vision check-up is always fine.

_____ **Total**

Kinesthetic/Tactile (learn by doing or touching)

- _____ I start a project before reading the directions.
- _____ I hate to sit at a desk for long periods of time.
- _____ I prefer first to see something done, and then to do it myself.
- _____ I use the trial and error approach to problem-solving.
- _____ I like to read my textbook while riding an exercise bike.
- _____ I take frequent study breaks.
- _____ I have a difficult time giving step-by-step instructions.
- _____ I enjoy physical activity, and do well at several different types of sports.
- _____ I use my hands when describing things.
- _____ I have to rewrite or type my class notes to reinforce the material.
- _____ **Total**

Total the score for each section.

A score of 21 points or more in a learning style indicates strength in that area. Insert your scores in the spaces provided. The highest of the three scores indicates the most efficient method of information intake, or “learning style,” for you.

Visual _____

(Such a learner benefits from the text, from filmstrips, charts, graphs, etc.)

Auditory _____

(Such a learner benefits from audiotapes, lectures, etc.)

Kinesthetic/Tactile _____

(Such a learner benefits from using “touch” or physical activity; like taking notes, rewriting class notes, practicing/repeating a movement, etc.)

Learning Styles Chart

After you find your “Learning Style” – read below for ways to study and learn that work best for you.

AUDITORY - BEST WAYS TO STUDY

- verbal instructions
- discussions/talking with others
- sounding out words
- remembering by saying things out-loud over and over
- talking through problems
- talking rather than listening

Too much noise will distract you.

VISUAL - BEST WAYS TO STUDY

- seeing, watching
- staring into space to visualize concepts
- remembering words or ideas by their shape or configuration
- organizing thoughts on paper by making lists or using calendars to plan ahead

Too much visual stimulation, movement, or disorder will distract you

KINESTIC BEST WAYS TO STUDY

- direct involvement
- reading action stories
- remembering things you've done
- trying things out (touching, feeling, manipulating)
- addressing problems physically (through activity)
- using gestures when speaking

It is difficult for you to learn from visual and auditory presentations that don't physically involve you.

First a thought, and then some questions for you to answer:

Thought – some people find that they learn even easier if they combine, or use two learning styles at once. For instance “Sister 3” found if she read out loud – she could learn something easier than if she read silently. Reading “out loud” uses both the Visual and Auditory senses; while reading silently uses just one sense – Visual.

1. Using this information, what can you do to make learning and remembering easier for yourself?
2. Is “understanding how to learn better and easier” important to you?
3. If so, what are you willing to do to learn better and more efficiently?



Imagine If You Were Your Own Boss . . .

Do you have what it takes to be an Entrepreneur??

No one could tell you what to wear, what time to come in, what time to leave, or how to wear your hair. You would be the one making the rules and enforcing them. Do you see yourself doing that? To start your own business and truly succeed, it takes not only a good idea but also lots of long hours and hard work. Could this be you? The quiz below will give you an idea if you have what it takes to be your own boss!

Circle the number that you feel describes you best (5= **strongly agree**, 1= **strongly disagree**)

- | | |
|---|-----------|
| 1. You manage your time well. | 5 4 3 2 1 |
| 2. You are competitive and like to win. | 5 4 3 2 1 |
| 3. You stick to a goal even if it means changing your plan. | 5 4 3 2 1 |
| 4. You are well organized. | 5 4 3 2 1 |
| 5. You are independent. | 5 4 3 2 1 |
| 6. You would rather do something right than finish quickly. | 5 4 3 2 1 |
| 7. You are self-confident. | 5 4 3 2 1 |
| 8. You are willing to work hard. | 5 4 3 2 1 |
| 9. You like to come up with new ways to solve problems. | 5 4 3 2 1 |
| 10. You like to work under pressure. | 5 4 3 2 1 |

How did you score?

Your Total Score is _____

Over 35

You seem to have the skills and love of work that are needed to start and operate a business. Many business people began dreaming about making money from an invention or service when they were in middle school. Starting your own business or company is certainly something to think about as you are planning your future.

Less than 35

Don't be discouraged. There is no set formula for who can and cannot be a successful business owner or entrepreneur. You can improve your chances for success by taking courses in school, studying on your own, practicing the things listed in this quiz, and watching how successful business owners go about their work.

Skills for the Workplace....Get Them, Keep Them

There are many ways to develop skills: school, social, and leisure activities, work, sports, hobbies, home chores, and volunteer work to name a few. The skills you build during your school years will become the building blocks of your work foundation. Think of yourself now, in school, and evaluate each skill as used in school. Put a check mark in the box that best describes your level of each skill.

CAN DO NEEDS WORK

Communication Skills

- | | | |
|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | Giving class presentations |
| <input type="checkbox"/> | <input type="checkbox"/> | Reading manuals |
| <input type="checkbox"/> | <input type="checkbox"/> | Writing clearly and exactly |
| <input type="checkbox"/> | <input type="checkbox"/> | Listening and responding to what others say |

Problem Solving

- | | | |
|--------------------------|--------------------------|---------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | Analyzing information |
| <input type="checkbox"/> | <input type="checkbox"/> | Identifying the problem |
| <input type="checkbox"/> | <input type="checkbox"/> | Understanding the problem |
| <input type="checkbox"/> | <input type="checkbox"/> | Solving the problem |
| <input type="checkbox"/> | <input type="checkbox"/> | Applying the solution |

Knowing How to Learn

- | | | |
|--------------------------|--------------------------|------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | Asking questions |
| <input type="checkbox"/> | <input type="checkbox"/> | Reading Information |
| <input type="checkbox"/> | <input type="checkbox"/> | Using the library |
| <input type="checkbox"/> | <input type="checkbox"/> | Researching information |
| <input type="checkbox"/> | <input type="checkbox"/> | Joining activities and clubs |

Responsibility

- | | | |
|--------------------------|--------------------------|--------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | Doing homework |
| <input type="checkbox"/> | <input type="checkbox"/> | Meeting project deadlines |
| <input type="checkbox"/> | <input type="checkbox"/> | Getting to class on time |
| <input type="checkbox"/> | <input type="checkbox"/> | Following a schedule |
| <input type="checkbox"/> | <input type="checkbox"/> | Being on sports teams or clubs |

Creative Thinking

- | | | |
|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | Learning how others have been creative |
| <input type="checkbox"/> | <input type="checkbox"/> | Using your imagination |
| <input type="checkbox"/> | <input type="checkbox"/> | Trying new ways of doing things |
| <input type="checkbox"/> | <input type="checkbox"/> | Looking at issues from a different point of view |

CAN DO NEEDS WORK

People Skills

- | | | |
|--------------------------|--------------------------|--------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | Getting along with others |
| <input type="checkbox"/> | <input type="checkbox"/> | Meeting new people |
| <input type="checkbox"/> | <input type="checkbox"/> | Working on a team |
| <input type="checkbox"/> | <input type="checkbox"/> | Respecting the ideas of others |

Personal Skills

- | | | |
|--------------------------|--------------------------|----------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | Making ethical choices |
| <input type="checkbox"/> | <input type="checkbox"/> | Motivated and enthusiastic |
| <input type="checkbox"/> | <input type="checkbox"/> | Reliable and dependable |
| <input type="checkbox"/> | <input type="checkbox"/> | Pride in appearance |
| <input type="checkbox"/> | <input type="checkbox"/> | Courteous and respectful |

Self-Management

- | | | |
|--------------------------|--------------------------|----------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | Scheduling your day |
| <input type="checkbox"/> | <input type="checkbox"/> | Setting priorities and goals |
| <input type="checkbox"/> | <input type="checkbox"/> | Being flexible |
| <input type="checkbox"/> | <input type="checkbox"/> | Positive attitude towards change |

Technical Skills

- | | | |
|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | Using a keyboard |
| <input type="checkbox"/> | <input type="checkbox"/> | Using a word processing program |
| <input type="checkbox"/> | <input type="checkbox"/> | Organizing and analyzing info with spread sheets |
| <input type="checkbox"/> | <input type="checkbox"/> | Developing PowerPoint |
| <input type="checkbox"/> | <input type="checkbox"/> | Cutting or Copying and pasting |
| <input type="checkbox"/> | <input type="checkbox"/> | Using the Internet for research |
| <input type="checkbox"/> | <input type="checkbox"/> | Using e-mail |

1. What are your areas of strength (categories with the most "can do" checkmarks)?
2. What areas do you need to develop and improve for success in school and your future career (categories with the most "needs work" checkmarks)?

Job hunters with 'Soft Skills'

Lead the pack!



While **specific job related skills** are taken for granted in today's job market; employees with “**soft skills**” who can self-manage and communicate well are in demand as companies seek creative solutions to the challenges they face. Some soft skills in demand include:

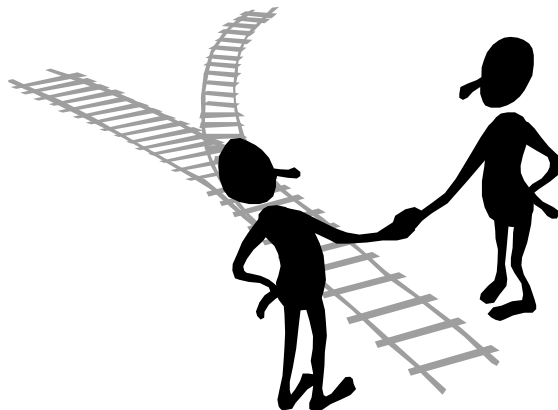
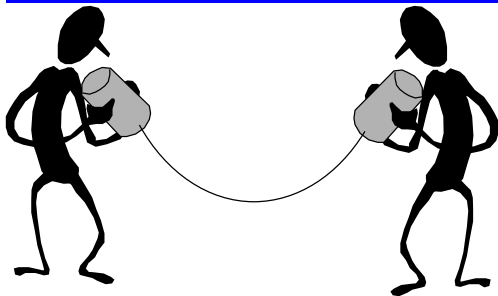
- The ability to embrace change effectively
- Learning to learn
- Basic academic skills in reading, writing, and computation
- Good communication skills, including listening, speaking, and “presentation”
- Creative thinking and problem solving
- Good self-esteem, motivation, and goal setting skills
- Personal “self-management” and career development skills
- Good relationship building, “interpersonal” skills, including teamwork and networking
- Organizational effectiveness and leadership
- Awareness of different cultures, languages, business protocols and etiquette

To learn more about “Soft Skills” and their importance to work and life in general, take a look at the websites below:

<http://jobs.aol.com/articles/2009/01/26/top-10-soft-skills-for-job-hunters/>

<http://www.save500challenge.org/>

<http://web.inter.nl.net/users/we-team/articles/srm0699.htm>



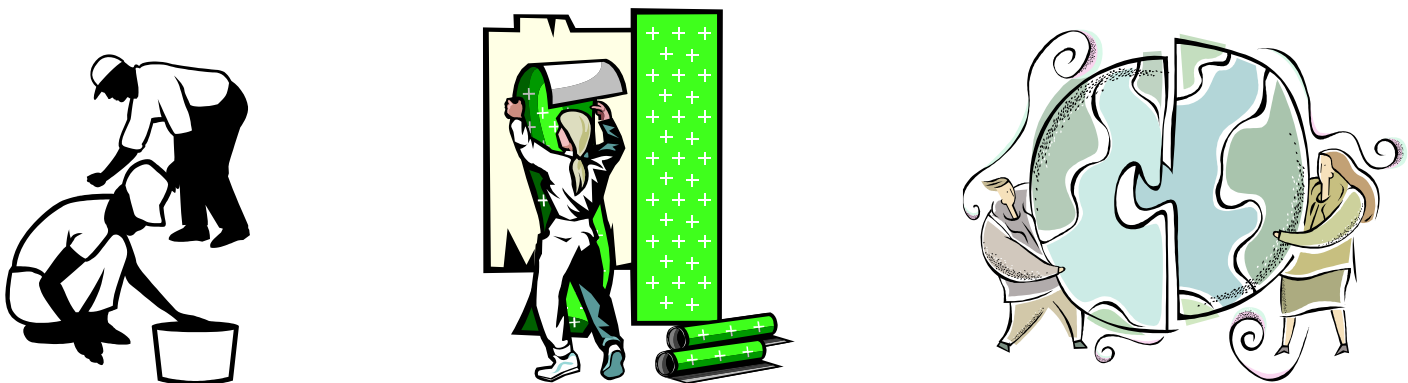
What Do You Know About the World of Work?

Test your knowledge on the world of work by circling the correct answer to the questions that follow.

1. Most people work in the same job for 25-30 years True or False
2. Career planning should begin by deciding how much money you want to earn True or False
3. Most people spend more time with family and doing leisure activities than they do at work.... True or False
4. A career cluster is a:
 - a. group of workers clustered in a particular career.
 - b. group of careers that have something in common.
 - c. group of careers clustered in a geographical area.
5. The level of skills required for jobs of the future will be:
 - a. higher
 - b. lower
 - c. about the same.
6. People with disabilities have very few career options. True or False
7. During the last decade, the number of women in the workforce has:
 - a. increased.
 - b. decreased.
 - c. stayed the same.
8. The majority of jobs in the future will require education and training past HIGH SCHOOL.
True or False
9. It's best to wait until you are a senior in high school to decide on a definite career.
True or False
10. The Child Labor Law says that a minor may start to work at age:
 - a. 13.
 - b. 14.
 - c. 15
11. An entrepreneur is a:
 - a. new hybrid automobile.
 - b. section of the official 16 Career Clusters.
 - c. person who starts a new business.
12. Career planning is something you do once in your life and never have to think about again.
True or False

Answers to: What Do You Know About the World of Work?

1. False. The statistics show that workers, between the ages of 18 and 38, change jobs an average of 10 times.
2. False. Although money may be an important thing in choosing a career, career planning should begin with making sure the career suits your interests, abilities, and desired/chosen lifestyle.
3. False. The average American spends more time at work than any other activity.
4. b. A group of careers that have something in common. They may share similar job duties, skills, and industries.
5. a. Future jobs will require higher-level math, reading, and problem-solving skills; as well as more technical knowledge.
6. False. People with disabilities can perform the tasks required for many careers - with the right help and support.
7. a. Increased
8. True. Although only about one job in five will require a four-year college degree, most will require education or specialized training beyond HIGH SCHOOL.
9. False. It is important to start thinking about careers and making appropriate educational choices. However, you need to keep your options open. What you want today may not be right or even available tomorrow.
10. b. 14
11. c. A person who starts and operates a new business. Strong leadership, a willingness to work hard, and a vision for the future - are skills and traits needed when you are your own boss.
12. False. As the workplace changes and people change jobs and occupations more frequently, career planning becomes a life-long process.

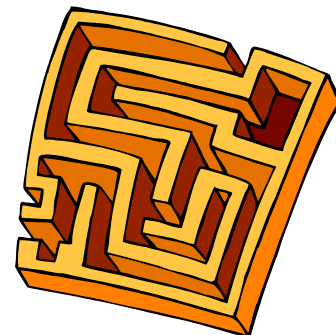


Consider the A-Maze-ing Possibilities

Apprenticeship: Apprenticeships involve working with experienced workers. You take classroom training and get work experience in your occupational area; and, you get paid! For more information visit:

<http://www.workforce.nd.gov/programs/apprenticeship/>

Military Training: The Military trains people in many career areas. Plus it provides tuition help for colleges and universities. Each recruit signs a legal contract for a specified number of years of duty. For more information visit: www.usmilitary.com



One to Two-Year Community and/or Technical Colleges: Provide up to 2 years of post-secondary education beyond high school. You may choose to get a diploma, certificate or a two-year degree in a specific career or occupational field and go directly to work. (Or you may be able to transfer to a four-year college or university; however you need to check with the specific 4-year program and college that you plan to transfer into - to make sure the credits you earn in the one-two year institution will transfer in).

Four-Year Colleges and Universities: Four-year bachelor degree programs are available through public and private colleges and universities.

Masters Degree Programs: These programs require up to 2 years of additional college beyond the bachelor degree.

Doctorate Degree Programs: These are specialized programs of up to 4 years of college beyond the bachelor's degree. If it is in area such as dentistry, it is sometimes called a "First Professional Degree."

Your high school graduation is the starting point for achieving your dreams. You are probably unsure what educational and training options are available to you. You might even feel like you are in a maze. Each pathway described above and listed below can lead to great careers. It is up to you to explore your future options and decide which path is right for you.

After all, the more information you gather now, the easier it will be to make a decision later.

For information on postsecondary education options:

- visit www.rureadynd.com (if you need login information – ask your school counselor)
- consult the **ND Career Outlook** magazine in your counselor's office or school library, or
- Go to <http://www.ndus.nodak.edu/campuses/> to find out what the ND University System Campuses have to offer.

BE READY! Consider the A-Maze-ing possibilities available to you today – to build tomorrow's future!

Apprenticeships

Military Training

One to Two-Year Community and/or Technical Colleges

Four-Year Colleges and Universities

Masters Degree Programs

PhD/Doctorate Degree Programs

Professional Schools like: Medicine, Law, Veterinary Science, Nurse Anesthetist, or Dentistry.

Cool Jobs in Science and Biotech

Unfortunately for many of us, we allowed our high school science classes to teach us only one thing; that we are not meant to be scientists. For the more curious students, those classes are the first step toward successful careers in a growing industry.

The number of science jobs will increase at a fast rate between now and 2018. Environmental scientists, hydrologists, and geoscientists will experience the fastest growth.

For most careers in science, you need at least a 4-year degree. Many are asking for even more education. Many of these careers pay from \$56,000 to \$95,000, with the some earners making much more. (The average job in North Dakota pays about \$35,000.) One thing's for sure, if you're interested in these careers, you'd better take lots of math and science courses.

The top 10 jobs in science (based on the projected job growth) as reported by the US Bureau of Labor Statistics.

Career	Description	Earnings Median US salary	New Jobs Created in US By 2018
Environmental Scientists	Research issues about natural resources, plants, animals and humans. Use findings to make others know about pollution and how it can be prevented.	\$59,750	16,600
Hydrologists	Study water and rainfall around the world. Their research helps other people understand what pollutants are doing to the water supply.	\$71,450	1,500
Geoscientists	Study physical parts of the earth; also includes the atmosphere.	\$79,160	5,900
Medical Scientists	Study human health and diseases in order to develop treatments and discover ways to stop diseases.	\$72,590	11,600
Biochemists and Biophysicists	Study how chemistry and physics have an effect on living things.	\$82,840	8,700
Atmospheric Scientists	Watch the how the earth's atmosphere acts in order to understand its role in the environment. People pay more attention to this as they learn more about global changes.	\$81,290	1,400
Material Scientists	Study what materials contain in order to make them better or develop new ones. These materials, such as metals or plastic, can be found in everyday items.	\$82,120	2,300
Physicists	Study the properties of matter and motion. Depending on their special area, they may research how the universe started or they may develop new scientific tools.	\$97,850	2,500
Biomedical Engineering	Apply knowledge of engineering and biology to the design and development of artificial organs, prostheses (fake legs, etc.), instruments, etc.	\$78,860	11,600
Biological Scientists	Study life from microscopic organisms to humans so we can better understand how they live in their environment.	\$68,270	5,900

Generation Green! (Science and technology at work!!)

If you think about our environment, the pollution, pesticides, or all the garbage we produce...how about 254 million tons a year...you may have “green” values. You can learn to be even more “green” by exploring new jobs in research, engineering, and conservation. Many of today’s jobs are being reinvented as “Green Jobs.” These are jobs that protect the environment and help to improve our quality of our life.

North Dakota’s up-and-coming green job areas include:

Clean Coal Energy:

The lignite coal industry in ND currently employs 4000 individuals that are directly related to mining or producing coal related energy; however, another 24,000 North Dakotans work in jobs that are “by-products” of the coal industry (suppliers, equipment operators, office staff, retailers, etc.).

Are you interested in being able to afford to heat your house, AS WELL AS careers in energy? Since the United States (and ND) has lots of coal and it is the cheapest source of energy, a career in the clean coal energy field may be perfect for you! Researchers are looking for and finding ways to make burning coal cleaner; as well as ways to use the bi-products of coal related energy production. Turning the coal into gas by a process called gasification, or by turning “fly ash” (a bi-product of coal-fired electrical generation power plants) into concrete, are two methods that are helping to make coal energy – “green energy”. Another process “coal drying” is being used by power plants to make the “coal to electricity” generation process more environmentally friendly. Yet another “green method” being developed by the coal industry is the use of “carbon sequestration” which will result in less carbon monoxide being released into the atmosphere. If you are interested in working in a cutting edge field, this may be for you.

Solar and Wind Power:

Looking for ways to save \$\$\$? Investing in wind towers and other wind products that get energy from the wind could be the answer. The wind and sun are free! You do the math! If you’ve always had a thing for science fair projects, this could be the chance to bring those skills to life and get paid for it!

Biofuels:

Instead of spending \$\$\$ on fossil fuels from other countries, biofuels can be made from waste products or organic materials grown in our own country. These renewable fuels replace oil and coal that are made from the earth over millions of years. If experimenting in a lab sounds like you, then turn your willingness to wonder into this career.

Energy Efficient Automobiles:

The world is moving away from gas guzzling vehicles toward those using renewable energy. To produce energy smart vehicles, a variety of workers are needed. If you have an interest in design technologies, this could be the field for you!

Mass Transit:

Whether its trains, planes, or automobiles; there are many kinds of jobs that are associated with transporting people or goods. Are you a problem solver? Then a career in logistics could be the final piece to your career puzzle.

Making Buildings More Energy-efficient:

The way a building is built, insulated, heated and ventilated, adds to how much energy it uses and how much carbon pollution is given off. So, making homes and buildings more energy efficient is a priority for those who think “green.” Are you an artist? Are you strong in math, science, or enjoy architecture? Then this career path can build you a profession like no other.

You’ve heard of “white collar” and “blue collar” jobs; but are new “Green Collar” jobs being created? Or, are today’s jobs just being reinvented? And, the answer is ...Yes! Yes! A wind power turbine installer is an example of a new green job. People with these skills also work in coal-fired power plants and the oil field. A carpenter, once thought of as “blue collar”, can become “green collar” by using new materials and technologies to make homes and buildings green.

Did you know?

A **Wind Energy Technician** takes care of turbines on wind farms. A strong knowledge and understanding of mechanical and electrical rules would be great! Also a must – being in good shape! Taking care of really tall turbines involves climbing lots of stairs.

Welders are very important to solar power manufacturing.

Machinists make parts for turbines that produce wind power.

Industrial Truck Drivers transport supplies and fuels.

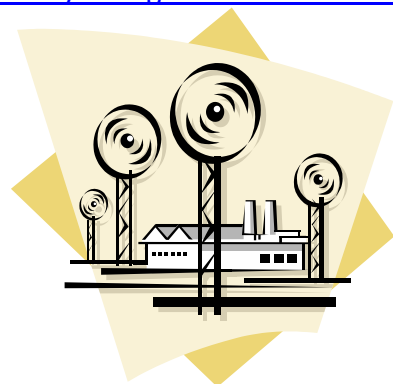
There are over **2,082 Electricians** and nearly **3,406 Carpenters** in North Dakota.

A **Biodiesel Fuel Specialist** looks for other ways to make energy. If working in a lab testing biofuel samples sounds interesting, why not go for a college degree in chemistry or mechanical engineering? Both of these college majors could land you a job that pays well!

New education/training options are being added at all levels in North Dakota’s schools. From HS career and technical classes, technical and community colleges, and on to university; taking the right courses will give you an advantage in the world of “green” jobs. Check with your guidance counselor to see what Major Areas of Interest could help you in the future...not just to get a job, but help you get a job that might change the world!

Don’t just go green...BE Green! Check out the links below:

Ever heard of a solar power backpack? Go to <http://www.earthtechproducts.com/solar-backpacks.html> to learn more. What’s the least wasteful city in America? Find out at www.greenbiz.com. What’s wind energy like in North Dakota? <http://googleblog.blogspot.com/2010/05/not-merely-tilting-at-windmills.html>



Career and Technical Education



Doorway to your Future

Want to take high school courses that will help you develop skills for a future career?
How about exploring different career areas and clusters to see which holds your interest?

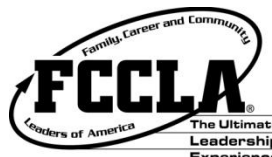
Career and technical education is a popular choice in today's high schools since it offers highly skilled training with hands-on learning experiences. After high school, CTE students can advance their skills by enrolling in a technical program at a 2-year college or 4-year college; and often-times technical college degrees, certificates or diplomas offer excellent job placement!

Get Started in High School - Explore CTE classes and Student Organizations and the Career Clusters for options for your future!

ND Career and Technical Education Programs	ND Career Clusters
<p>Students can take classes in:</p> <ol style="list-style-type: none"> 1. Agriculture Education 2. Business and Office Technology 3. Career Development 4. Family and Consumer Science 5. Health Careers 6. Information Technology 7. Marketing Education 8. Technology Education 	<ol style="list-style-type: none"> 1. Agriculture, Food & Natural Resources 2. Architecture & Construction 3. Arts, A/V Technology & Communication 4. Business Management & Administration 5. Education & Training 6. Finance 7. Government & Public Administration 8. Health Sciences 9. Hospitality & Tourism 10. Human Services 11. Information Technology 12. Law, Public Safety, Corrections & Security 13. Manufacturing 14. Marketing, Sales & Services 15. Science, Technology, Engineering & Mathematics 16. Transportation, Distribution & Logistics

Career and Technical Education Programs Offer:

- On-the-job work experiences through internships, apprenticeships, job shadowing, and cooperative education job opportunities that sometimes allow you to "earn while you learn"
- Hands-on work – where you can see results
- Chances to apply the skills that you learn, immediately and in the future.
- In North Dakota 8 out of the 10 fastest growing occupations by 2018, do not require a four-year degree!
- In North Dakota 65% of all new occupations require 2 years or less education or training past high school
- ND students who take at least 2 credits of CTE coursework (in one area) graduate at higher rates, than those who do not. (In 08-09 94% of ND graduates, who took at least two classes in the same CTE area, graduated from high school. In 08-09, 87% of all ND Students graduated from high school.)
- Opportunities to join student organizations with benefits including leadership development, scholarships, travel, and competitions to win awards and money. See the CTE Student Organization logos below:



Budgeting Is Common Cents!

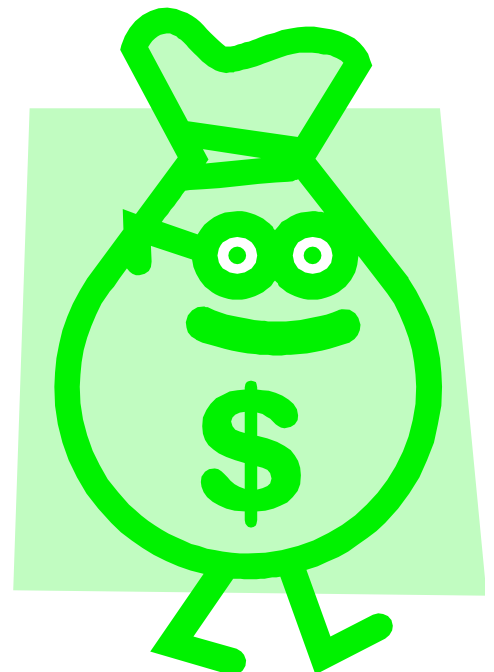
Now that you have some careers in mind, let's see how much money you need to live. For this exercise, let's assume that you are a single person living on your own in an apartment.

Step One	Choose an occupation, and then list the occupation and salary amount here. _____
Step Two	How much money will you earn each month? Your math skills come in handy here. Take the hourly salary of the career that you have chosen and multiply by two thousand and eighty hours, (40 hours per week times 52 weeks per year). If the salary is listed as Annual, go to the next line.
Step Three	Take that total and divide it by 12. Presto! You now know how much money you will earn in a month. List the monthly amount . _____
Step Four	The government takes out money like Social Security and withholding taxes to pay for benefits and services. The salary minus Social Security and withholding taxes equals your net take home pay . To figure YOUR net take home pay , you need to take out 23 percent of your salary per month. Multiply your salary per month by 23 percent and then list the amount of social security and withholding taxes.
Step Five	Subtract your Social Security and withholding taxes from your monthly salary to find your net take home pay . List that amount here. TAKE HOME PAY _____
Step Six	In table B below add all the expenses to find your Total Monthly Expenses
Step Seven	Subtract your Total Monthly Expenses from your Take Home Pay to get your balance. Will you make enough money to live on each month?

Budgeting is important to get a sense of where you're actually spending your money and where you might be able to save or cut back. Plan a sample budget below.

Table B	
Suggested Sample Monthly Expenses:	
Rent	\$650
Utilities	\$125
Food	\$200
Transportation	\$250
Entertainment	\$ 50
Miscellaneous (cell phone, Internet, snacks, etc.)	\$125
Health Insurance	\$100
Savings (calculate 10% of net take home pay)	
Total Monthly Expenses	
Take Home Pay – Total Monthly Expenses =	\$

Don't worry, budgeting your money takes practice!



What Do Middle School Students Need To Know About Financial Aid for College?

HS graduation and college or postsecondary education (beyond high school) and training may not even be on your radar screen at this point. However, early planning can help you decide how you will pay for your postsecondary education.

State of North Dakota Scholarships and Grants

North Dakota Academic or Career and Technical Scholarships

These scholarships reward high school grads for their academic achievement and workplace skills. They have many very specific course, grade, and testing requirements.

Need programs

Awards are based upon the student's family income as reported on the Free Application for Federal Student Aid (FAFSA). There are many scholarships which students with need can qualify for by completing the form.

Federal Family Education Loan Program (FFELP)

A good education is worth the investment. The Federal Education Loans are made to students and parents by lenders. Check out these types of Federal Family Education Loans:

Subsidized Stafford Loan

For students who demonstrate financial need.

Unsubsidized Stafford Loan

For students who do not demonstrate sufficient financial need. This loan can be used to supplement a Subsidized Stafford Loan.

PLUS Loan

For eligible parents of a dependent student attending post-secondary school up to 4 years.

Consolidation Loan

For borrowers who want to combine their outstanding education loans into a single loan with a single monthly payment.

When you and your parents are ready for some information (the earlier the better) talk with your school counselor!



Making it to the Pro's . . . the Competition is Fierce!

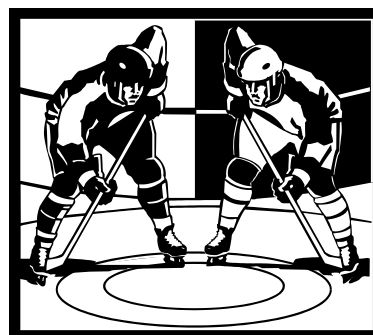
The chances of a high school athlete making it to the professional level are very low.

With less than 1% of HIGH SCHOOL athletes ever making it into professional sports, you need a career plan (call it a "Back-up Plan!") just in case you don't make the cut. If you are lucky enough to make it as a professional athlete, you'll have a limited number of years to perform before age and possible injuries begin to limit your competitiveness. So, **think about a back-up plan for the future.**

If you think you have the talent and commitment to work hard and make it to the pros, you should follow your dream. If you land an athletic scholarship to play in college, you'll need to keep up your grades. But, keep that back-up plan in mind as you plan your major.

All of the data on the table below (except for WOMEN'S HOCKEY) was taken from the National Collegiate Athletic Association web site. (Interested in more information? Go to <http://www.ncaa.org/> then click on: Home, Academics and Athletes, Education and Research, Probability of Competing)

WOMEN'S BASKETBALL:	NUMBERS OF ATHLETES
HIGH SCHOOL senior athletes - NCAA college senior athletes What are the odds of making it to the pros? How many make it? There are 13 teams in the WNBA with a total of 156 women	129,408 HS senior athletes 3,355 NCAA college senior athletes 156 WNBA professional athletes
MEN'S BASKETBALL:	NUMBERS OF ATHLETES
HIGH SCHOOL senior athletes - NCAA college senior athletes What are the odds of making it to the pros? How many make it? The NBA has 30 teams with a total of 450 players	156,096 HS senior athletes 3,682 NCAA senior athletes 450 NBA professional athletes
WOMEN'S HOCKEY:	NUMBERS OF ATHLETES
HIGH SCHOOL senior athletes - NCAA college senior athletes How many make it to the National Women's Olympic team? (The top team for this women's sport.)	No data found for numbers in HS women's hockey 2000 estimated number on 80 NCAA teams 25-40 estimated number on Nat. Women's Olympic team
MEN'S FOOTBALL:	NUMBERS OF ATHLETES
HIGH SCHOOL senior athletes - NCAA college senior athletes What are the odds of making it to the pros? How many make it? The NFL has 34 teams with a total of 2,720 players.	306,221 HS senior athletes 13,612 NCAA college senior athletes 2,720 NFL professional athletes



Be a Goal Setter

You set goals for one reason – to help you get what you want. Setting goals will help you take control of what happens to you now and in the future.

For a goal to be real, it has to be:

- important to you.
- within your power to make it happen through your own actions.
- something you have a reasonable chance of achieving.

Most importantly, it must be clearly defined and have a specific plan of action. You can set goals for different things in your life. Goals you set may be for things you like to do, what you want to accomplish, how you want to spend your time and many other things. For now, let's think about setting goals in three areas: school, future education, and career. List a goal in each of the areas and include what you can do today and in the future to achieve the goal.

SCHOOL GOALS

My goal: What I can do today: What I need to do in the future:

FUTURE EDUCATION GOALS

My goal: What I can do today: What I need to do in the future:

CAREER GOALS

My goal: What I can do today: What I need to do in the future:

Short-term goals are ones that you will achieve in the near future (e.g., in a day, within a week, or possibly within a few months).

Long-term goals are ones that you will achieve over a longer period of time (e.g., one semester, one year, five years, or twenty years).

Check your progress often to see that you are doing what you need to do to reach your goals; both short term and long. Remember we set goals to help us get where and what we want. As you continue to explore and experience life, work and school – you will probably need to change some of your goals!



Don't Leave Your Future To Chance!

Ask your school counselor for a copy of ND's premier career magazine – **CAREER OUTLOOK**. In the annually updated **Career Outlook** you will find checklists and self-assessments, many more careers to read about, and listings of all the college programs in ND.

Also in the Career Outlook you can learn about opportunities available through: the military, apprenticeship programs, Job Corps, and Distance Education. You will also find information about the ND University System admission requirements, the new ND Academic and Career and Technical Scholarships, how to search for a job, and much more!

Take Control of Your Future With:

WWW.RUReadyND.com

Discover Your Interests, Values, and Skills with RUReady's:

Interest Profiler - What kind of things do you like to do?

Work Values Sorter - What's important to you in a job?

Basic Skills Survey - What skills do you have now?

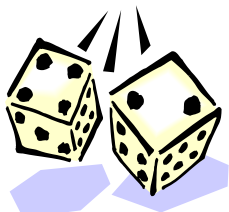
Explore Your Options!

Match your interests and needs to the 650+ careers, 8,000+ postsecondary schools, and 2,000+ scholarships in RUReadyND.com

Plan Your Future!

Build a portfolio with these tools: Resume Builder, Letter Creator, Job Search, and Interview Questions. Keep your resume on www.RUreadyND.com in your portfolio. You never know when you might need one. It will help you fill out college and job applications because you'll have all the information in one place.

Remember: The goal is to find a job that you will like going to every day, **and** a job that pays enough to support the kind of life you'd like to live—Ramen noodles or steak!



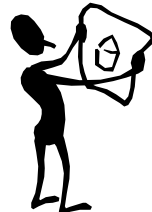
GAMBLE???

OR

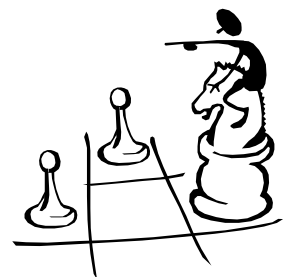


EXPLORE

AND



PLAN



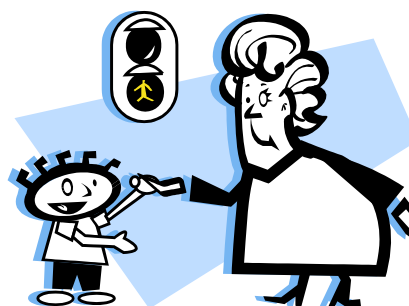
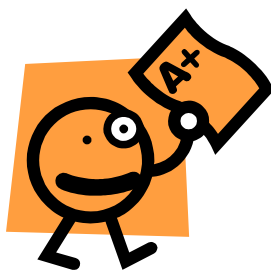
CAREER CLUSTERS

Think it's too early to start thinking about careers? Think again! Your career may begin years from now and will probably change many times over your lifetime. During middle school, it's important to learn about different occupations and jobs, how to compare, and match them to your interests and abilities.

To help you get started, information many occupations has been organized by career cluster on the following pages. Just enough information has been included for you to decide if you want to know more about a certain occupation! Find something interesting? Do a more in-depth search of North Dakota career choices at www.rureadynd.com

EDUCATIONAL CHOICES – DEFINED *(for following pages)*

Now	Requires on-the-job-training, work experience, or a high school diploma.
Next	Requires up to 2 (Associate Degree), or sometimes 4 years of post-secondary education beyond high school (Bachelor's Degree).
Later	Requires at least 4 years of post-secondary education beyond high school (Bachelor's Degree), and sometimes - work experience. Master's Degree requires 2 years beyond a 4-year degree (bachelor's degree) Doctorate requires up to 5 years beyond 4-year degree First Professional Degree refers to many occupational areas including dental, optometry, law, medical, veterinary degrees, etc.
HD	Indicates a job that is in "high demand" more jobs than people qualified to fill them.
OJT	Able to prepare for these jobs with "on the job" training.



At this point, you probably don't know a lot about North Dakota's Academic and Career and Technical Scholarships. Grades and lots of other stuff are needed to qualify you to get the scholarship. You will probably begin to receive that information at the end of the 8th or beginning of 9th grade. See your school or career counselor if you have any questions at this time.

Be involved. Join clubs, play sports, and other activities. Where will you find the time?

Volunteering to help others will help you get to know people in your community. You may discover your perfect career! Make community service part of your PLAN. Be sure to talk to your high school counselor, teachers, and coaches about options!

North Dakota Career Cluster List

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The following pages contain information on a sampling of occupations in each Career Cluster.

Wherever possible the most recent ND occupational (job) information has been used.

Information in each Cluster begins with a general description of the interests and work related to the Career Cluster, and then information is listed in order of:

Job Title Job Description Average Salary Education Requirements

BE AWARE that qualifications for jobs vary by position, employer, company, and location or state; so it is difficult to predict exactly what training or credentials are required for a specific job. The headings defined below are intended to give you the common requirements for these jobs within the state of North Dakota.

NOW –Means it may be possible to get these jobs with a high school diploma, on-the-job training (OJT), and related work experience, or sometimes with less than a high school diploma.

NEXT –Means while some employers may require a 2 or 4-year degree, other employers may accept related work experience, apprenticeship, or, a specific professional license, credential or certificate.

LATER –Means that these jobs generally require a 4-year degree, professional license or credential, master's degree, or more. However some employers may accept work experience and/or a 2-year degree.

Agriculture, Food & Natural Resources

Do you like to work outside? What about discovering new ways of growing food or discovering better ways to use our natural resources? The agricultural and natural resources industry is a great career choice for people who like to work with the earth's natural resources.

	Job Title	Job Description	Average Yearly Salary	Education Requirements
NOW	Farmer, Rancher, Crop Farm worker/Laborer	Does general farm labor duties. Employees who work only part of the year may be under their direction.	\$19,600-\$35,000 Varies widely	*OJT or HS Diploma
	Landscape Gardener/Lawn Maintenance Worker, Landscape Laborer	Landscapes and takes care of gardens, lawns, and grounds on public or private property.	\$16,200-29,000	OJT or HS Diploma
NEXT	Agricultural Supervisor, Animal Care Supervisor, Horticultural Supervisor	Supervises workers who cultivate, plant, and harvest crops and tend livestock. Hires, trains, and assigns duties to workers.	\$24,650-47,500	2-year degree
	Chemical Technician Biological Aide, Agricultural Technician	Does chemical tests; sets up, operates, and takes care of lab instruments. Watches experiments, makes observations, calculates and records results.	\$29,600-56,400	2-year degree
	Geographic Information System or Global Positioning System Tech.	Operate the tools that display and analyze geographic data. Help plan uses for land, plot urban and rural areas and figure out how to get resources to remote areas.	\$16,768-\$24,569	2-year degree or 4-year degree
	Forest/Conservation Technician, Tree Planter, Forester Aide	Helps foresters give information about natural resources to people so they can use the land in the best way	\$28,244-\$43,590	2-year degree OJT or HS Diploma
	Water and Sewage Treatment Plant Operator, Waterworks Pump Station Operator, Waste Treatment Operator	Removes pollution from wastewater. Controls equipment that moves cleans the water. Takes samples of the water, Does laboratory tests.	\$27,186-\$45,463	2-year degree OJT HS Diploma Preferred, License required
LATER	Forester, Forest Ecologist, Range Manager	Protects forests against fire, insects, disease, floods, and erosion, Finds new and better methods and tools for conserving resources. Works with farmers, ranchers, and other land managers to develop conservation programs.	\$35,244-\$58,940	4-year degree
	Soil/Plant Scientist, Agronomist, Farm Manager	Researches production and yield of plants or crops. Develops methods of conserving and managing soil.	\$37,048-\$66,710	4-year degree and/or work experience
	Zoologist/Wildlife Biologist, Human and Animal Pathologist	Studies animal life such as where they live, how many there are, what disease they have (like chronic wasting disease in deer in North Dakota). Uses computers to record information.	\$42,330-\$62,387	4-year degree And sometimes work experience

*OJT – stands for “on the job training”

Architecture & Construction

Can you assemble things in your mind? Do you have the ability to visualize a project and sketch it out? Occupations in this career cluster offer you a wide variety of tasks. You can do anything from designing buildings to the actual construction; you can start your own business and be your own boss.

	Job Title	Job Description	Average Yearly Salary	Education Requirements
NOW	Carpenter's Helper, *HD	Helps carpenters. Duties include supplying or holding materials or tools; cleaning work areas and equipment.	\$19,369-\$27,330	OJT HS Diploma Preferred
	Plumber/Pipefitter Helper	Helps plumbers or pipefitters put in pipes for air, ammonia, gas, and water systems.	\$18,290-\$31,936	OJT HS Diploma Preferred
	Brick mason, Bricklayer	Sets bricks, concrete blocks, and other masonry materials. Builds and repairs walls, floors, chimneys, and other structures.	\$35,626-\$55,508	OJT HS Diploma Preferred
	Drywall Installer – Finisher, Sheetrock Applicator, Taper	Installs, finishes drywall used for walls and ceilings. Measures, cuts, and fits sheetrock around windows, doors, and outlets.	\$26,539-\$40,991	OJT HS Diploma Preferred
NEXT	Carpenter, HD House repairer, Cabinetmaker	Cuts, fits, joins wood and other materials in building windows, doors, hardwood floors, cabinets, etc. Works from blueprints.	\$24,320-\$37,107	2-year degree, OJT or HS Diploma preferred
	Inspector: Construction, Building, Plumbing, or Electrical	Looks at construction, change, or repair of buildings to make sure that the methods and materials used meet rules (code). Inspects buildings, highways and streets, sewer and water systems, dams, bridges, etc.	\$35,499-\$56,809	2-year degree Work experience in related field required License also required
	Electrician Chief Electrician	Puts in and repairs electrical wiring in buildings, mines, and large equipment. Pulls wire or cable to connect switches and outlets. Installs fiber optic cables.	\$30,746-\$52,936	2-year degree Apprenticeship License required
	Heating and Air-conditioning Mechanic, HD	Installs, takes care of, and repairs heating and air conditioning equipment. Checks defects and repairs or replaces parts.	\$32,768-\$54,075	2-year degree
LATER	Surveyor - GIS Expert, Land Expert, Mineral Surveyor	Provides information about the way land is before it is moved for mining or building roads. Uses computer aided drafting, makes maps, and does soil testing.	.\$21,478-\$57,886	2-4 year degree License required
	Construction Mgr, Contractor, Building & Bridges Supervisor	Tells construction bosses what to do. Watches for safety, correct supplies, and appropriate building methods as the building is going up	\$47,244-\$98,747	4-year degree and/or work experience, License required for general contractor
	Architect – School-Plant Consultant	Plans, designs, and makes sure homes, office buildings, airports, or highways are built correctly. Uses computer-aided design and drafting (CADD) to prepare detailed drawings	\$39,990-\$70,990	4-5 year degree Sometimes work experience. License required

*HD – means job is in high demand

Arts, A/V Technology & Communications

Have you ever dreamed of being a movie star or a famous writer? You could be the next big Hollywood director or Michelangelo! If you have the ability to be very creative, there may be many opportunities to explore in this industry.

	Job Title	Job Description	Average Yearly Salary	Education Requirements
NOW	Actor – Comedian, Magician	Acts, does comedy, or magic tricks for audiences ; stage, television, or movies. Generally, formal training is necessary; some people enter the field without it.	Little info. for ND	OJT & HS diploma preferred Possible 4-year degree required
	Dancer - Choreographer	Dances alone or with a partner or group to entertain audiences. May perform ballet, comedy, concerts, etc.	\$28,678-\$34,991	OJT HS Diploma Preferred
	Musician/Singer – Composer, Music Director	Plays one or more musical instruments in solos or as a member of a musical group.	Little info for ND	Education, training and experience varies
NEXT	Broadcast Technician, Audio Operator, Television Technician	Works with electronic equipment used to record radio and television programs. Runs cameras, microphones, or other equipment.	\$19,88- \$43,703	2-year degree required
	Photographer, Photojournalist	Takes pictures for movies or still photos. Uses lights & camera lenses for taking formal picture s- to be sold to others.	\$18,544-\$34,715	2-year degree, OJT or HS Diploma preferred
	Telecommunications Line Installer, Repairer Communications Equipment Mechanic	Sets-up telephone equipment used in offices. Installs, services or repairs telephones on customers' property.	\$41,880-61,188	2-year degree required
LATER	Graphic Designer – Animator, Media Artist, Cartoonist	Creates art and design of magazines or newspapers. Uses computers to design new images or to change existing ones.	\$25,627-\$37,626	2-4 year degree
	Movie, television, or stage Producer/Director	Producers select plays, plan financing & budgets. Directors decide on lines in scripts; audition & select cast, conduct rehearsals, & direct work of cast & crew.	\$29,238-\$43,931	Requires 4-year degree Plus work experience
	Public Relations Specialist HD – Lobbyist, Sales-Service Promoter	Helps businesses to build and keep a good public image and promote their services, or products.	\$32,521-\$52,927	4-year degree Sometimes work experience required
	Commercial Art Director – Creative Director, Production Manager	Comes up with design ideas, plans presentations and directs workers. Helps with art work, layout, and writing dialog.	\$32,000-72,300	4-year degree Sometimes work experience required
	Curator – Archivist, Museum Technician and Conservator	Plans activities of a museum, art gallery, botanical garden, zoo or historic site.	\$27,000-52,200	4-year degree Master's degree preferred
	Librarian - Librarian Assistant	Organizes books, magazines, and videos. Helps people find information using library resources. Work for large companies, schools, or cities.	\$31,122-\$57,200	4-year degree Work experience or Master's degree preferred

Business Management & Administration

Have you ever wondered what goes on in those big, tall business buildings you see downtown? They are full of office managers and secretaries who do everything from writing information about various topics to answering phones. The industry depends a lot on the people who work behind the scenes.

	Job Title	Job Description	Average Yearly Salary	Education Requirements
NOW	Receptionist/Information Clerk, Insurance Claims Clerk, Shipping and Receiving Clerk	Receives and greets visitors. Keeps track of paperwork, gives information, and may perform other duties.	\$17,597-23,090	2-year degree or High school diploma & experience.
	Customer Service Representative, Order Clerk, Information Clerk	Provides information in response to questions about products and services; handles and helps to solve complaints.	\$20,650-27,992	OJT HS Diploma Preferred
NEXT	Administrative Assistant, Executive Secretary	Helps bosses by taking care of staff, records, budgets, and providing information to staff and clients.	\$26,488-36,699	2-year degree required
	Medical Secretary – Legal Secretary, Administrative Assistant.	Does secretarial duties using medical words and procedures. Uses personal computers, fax machines, photocopiers, and telephones.	\$22,196-32,767	2-year degree
LATER	Accountant/Auditor – Cost Accountant, Tax Accountant	Works with numbers. Keeps financial records for businesses, the government, or individuals. These records show how much money is earned, spent, and paid	\$33,760-50,549	4 year degree License required for Certified Public Accountant
	Administrative Services Manager, Court Administrator, Office Manager	Organizes typing, filing, bookkeeping, and the way things are done in the office in a business. Plans, and supervises the work of staff.	\$39,688-64,025	4-year degree
	General/Operations Manager – Department Store Manager, President	Organizes the people who work in corporations. Plans and directs the activities of the organization.	\$53,503-96,674	4-year degree plus work experience required
	Human Resources Manager, Employment Manager, Benefits Manager	Manages programs about the employment and treatment of workers. Hires and fires employees and supervises workers. Informs workers of their employment rights and benefits.	\$50,789-89,478	4-year degree or more, Sometimes work experience required
	Management Analyst, Business Consultant, or Reports Analyst	Works with businesses to find ways to operate well. Helps managers find problems. Collects, reviews, and studies information. Presents recommendations.	\$44,018-77,936	4-year degree Work experience and/or Master's degree preferred
	Training and Developmental Specialists	Conducts training and skill development for employees.	\$31,100-56,300	4-year degree Work experience or Master's degree preferred

Education & Training

If you want a job that is rewarding, consider teaching. With a career in education, you have the opportunity to inspire the minds of the future. In North Dakota, there is a high demand for educators and trainers due to retirements. The opportunities are wide open and you have the choice to work with children or adults.

	Job Title	Job Description	Average Yearly Salary	Education Requirements
NOW	Fitness Trainer and Aerobics Instructor – Personal Trainer, Recreation Worker	Teaches groups or individuals in exercise activities, & basics of sports. Helps participants improve their skills.	\$15,869-24,398	OJT HS Diploma Preferred
	Library Assistant – Film or Tape Librarian, Bookmobile Driver	Helps librarians organize books, magazines, etc. Helps patrons	\$15,626-23,695	OJT HS Diploma Preferred
NEXT	Teacher Assistant, Aide, or Para	Prepares classroom materials, supervises students, under the guidance of a teacher.	\$23,200	HS Diploma Preferred OJT , certificate 2-year degree
	Scuba Diving Instructor	Teaches people how to use self-contained underwater breathing apparatuses (S.C.U.B.A.) Provides training in the classroom, pool, etc.	Data not Available in ND	Certification required
LATER	Elementary School Teacher Secondary Teacher	Plans lessons and assignments. Teaches classes, and grades tests and papers.	\$32,225-48,200	4 year License required
	Career Advisor	Provide career activities and information to grades 7-12. Work under supervision of school counselor.	Not Available	4 year Credential Required
	Education Administrator, Principal	Plans and administers programs to provide education for students. Watches to make sure all programs follow the state & federal rules.	\$52,879-80,003	4 year degree Masters degree preferred License required
	School Counselor HD	Counsels students or small groups. Provides testing services, career information, and education for students.	\$33,324-53,046	Master's degree License & credential required
	Special Education Teacher, HD Teacher of Learning Disabled, Teacher of Emotionally Impaired Students	Teaches children who have special needs such as disabilities or gifted intelligence. Plans the classes each student needs, prepares lessons, and assigns work.	\$34,436-49,744	4 year degree and sometimes work experience. Certification required
	Career & Technical Ed. Teacher HD (Vocational Education Teacher)	Teaches/trains students in career-oriented areas; specific trades such as health care, business, auto repair, communications, and technology.	\$30,775-48,884	4 year degree (Work expertise in a particular field) Credential required

Finance

In this field, money is the name of the game and the payoff can be high. Many people have money to put into the bank or invest in the stock market, so job opportunities in this field are growing.

	Job Title	Job Description	Average Yearly Salary	Education Requirements
NOW	Insurance Processing Clerk, HD Reviewer Policy Change Clerk	Reviews insurance paperwork to make sure that all questions have been answered. Prepares new insurance policies, changes policies, and gives information to insurance agents.	\$23,098-\$33,200	OJT HS Diploma Preferred
	Payroll Clerk - Tax Preparer, Payroll Officer	Keeps track of wage information for payroll records. Keeps detailed daily, weekly, or monthly records.	\$25,968-\$37,519	OJT HS Diploma Preferred
	Bank Teller – Vault Teller, Foreign Banknote Teller	Cashes checks, accepts deposits and loan payments.	\$25,300-35,722	OJT HS Diploma Preferred
NEXT	Bookkeeping/Accounting Clerk HD	Records income and expenses in computer programs to keep financial information up to date. Prepares reports.	\$22,969-\$34,819	2-year degree
	Cost Estimators HD Construction Estimator	Prepares cost estimates to determine price of product or service.	\$31,644-54,198	2-year degree
	Insurance Claim Examiner HD Claim Agent	Studies insurance claims to see if clients' policies cover them for certain losses. Reviews data to determine amount of payment to person who suffered loss.	\$35,247-\$57,329	2-year degree License required
LATER	Actuary	Calculates insurance risks and premiums. Uses knowledge of math & statistics to plan financially stable insurance and pension programs.	\$95,980 US Avg Sal. *ND N/A	4 year degree advised Licensure exam required
	Financial Analyst HD– Investment Analyst, Personal Financial Advisor	Provides investment guidance to businesses and individuals. Makes recommendations to investors.	\$39,986-\$70,639	4-year degree
	Financial Manager HD– Credit and Collection Manager, Bank Manager	Manages spending by deciding how money will be used. Decides which investments are making money	\$53,261-\$102,464	4-year degree
	Stockbroker HD, Financial Planner	Buys and sells stocks, bonds, mutual funds, insurance, or other financial products for customers. Gives advice and information on the purchase or sale of financial products.	\$31,684-\$82,400	4-year degree License required
	Market Research Analyst - Marketing Manager	Researches market to decide the chances a product will sell. Use surveys results to create advertising based on people's likes and buying habits.	\$37,422-\$71,131	4 years degree and sometimes work experience

*ND salary information was not available because of the small number of auditors employed in the state.

Government & Public Administration

From the President of the United States to a legislative aide, this field has a wide variety of jobs from which to choose. You can be an elected official or hold a salaried position that links you to the government. So whether a local, state, or federal government employs you, you serve the community, state, and nation where you live. Democracy at its best!

	Job Title	Job Description	Average Yearly Salary	Education Requirements
NOW	License Clerk, Marriage License Clerk, Driver's License Clerk	Issues drivers, marriage, and/or other licenses/permits. Asks questions, records information, & collects fees.	\$19,100-\$31,700	HS Diploma
	Public Records Clerk, Court Clerk	Performs clerical/admin duties for city government. Prepares agendas, record minutes, answers correspondence.	\$19,100-\$31,700	HS Diploma
NEXT	Emergency Planner	Coordinates disaster response or crisis management activities. Prepares emergency plans, provides training.	\$28,640-\$44,093	Work experience in a related occupation
	County Assessor	Examines, analyzes, and interprets accounting records; gives advice and prepares statements.	\$24,500-\$46,551	2-year degree
	North Dakota Legislator	Develops, enacts, and amends laws. Studies reports and listens to people's opinions & interest groups to decide if a bill should become law.	\$1,040/mo/expenses \$148/day/ in session \$415/mo. Out-of-session health benefit	Elected to office
	Government Property Inspector/Investigator – Quality Assurance Inspector.	Inspects government property to make sure agreements are being followed. Prepares reports of investigations and recommends action	\$24,250-\$48,265	2-year degree
LATER	Government Service Executive, Human Resources Program Administrator	Manages government activities with the help of lower level managers.	\$35,620-\$172,400	4 year degree and sometimes work experience.
	Social/Community Services Manager Rehabilitation Center Mgr. Social Welfare Administrator	Directs social service programs to help people with health, welfare, or community service needs. Directs staff, plans where money will be spent, and prepares reports.	\$32,945-\$55,511	4-year degree and sometimes work experience
	President of the United States – Senator, Governor	Serves as the chief executive officer over the legislative, judicial, and executive branches of government. Works with congress /develop laws. Signs bills into law.	\$400,000	35 years of age natural-born citizen Resident of U.S. for at least 14 yrs.
	Urban and Regional Planner, City Planner, Program Services Planner	Comes up with plans that best uses a community's land and resources. Develops long-term and short-term plans for the future development of city or rural communities.	\$46,390-62,983	4 year degree Master's Degree

Health Science

With a caring hand and an understanding ear, doctors, nurses, and dentists can be our best friends when we are not feeling well. This is a world of fast-paced action and career growth. Opportunities range from working with infants to the elderly and everything in between.

	Job Title	Job Description	Average Yearly Salary	Education Requirements
NOW	Nurse Aid/Orderly, HD Home Health Aide	Takes care of patients in health care facilities.	\$20,166-25,596	OJT or HS Diploma Certification
NEXT	Veterinary Technician, HD	Works with veterinarian. Takes vitals, bandages, & prepares food for animals.	\$22,603-30,445	2-year degree
	Dental Hygienist	Provides preventive dental services such as teeth cleaning, polishing, and x-rays.	\$46,161-64,481	2-year degree License required
	Emergency Medical Technician/Paramedic, HD	Drives to the scene of emergencies to give first aid, treatment to sick or injured people.	\$17,128-35,039	2-year degree License required
	Radiologic Technologist, Ultrasound Technologist,	Positions patient, takes x-rays of all parts of the human body.	\$33,802-50,686	2-years degree License Required
LATER	Speech Pathologist	Examines and treats patients with speech, language, or voice disorders.	\$39,295-57,217	(Master's degree) License required
	Registered Nurse, HD Licensed Practical Nurse	Watches and records symptoms, reactions, and the progress of patients.	\$42,003-63,168	2-year degree or 4-year degree License required
	Pharmacist	Prepares and gives out prescription drugs. Provides advice about effects of drugs.	\$64,909-90,615	4 year degree (PhD, Doctorate)
	Physical Therapist	Improves ability to move, relieves pain, prevents or limits permanent physical disabilities. Provides exercise to improve strength.	\$51,097-71,575	4 year degree Master's degree License required
	Veterinarian	Examines, diagnosis, and treats medical problems in animals. May work with pets and/or livestock.	\$51,581-77,844	4-year degree First Professional degree License required
	Family Physician, HD General Practitioner Cardiologist, Dermatologist	Diagnoses illness, prescribes treatment for people suffering from injury or disease. Advises patients on prevention through exercise, diet, and preventive health care.	\$150,831-196,252	4 year degree Medical School. License required Internship required
	Dentist, Endodontist, Pediatric Dentist	Examines teeth and mouth to diagnose diseases. Examines X-rays, removes decay, repairs broken teeth, fills cavities; and more.	\$111,783-238,779	4-year degree Dental School License required

Hospitality & Tourism

From working at Disney World to McDonalds, jobs in this field allow you to meet new people all the time. In Florida, a large portion of employment is in the hospitality and tourism industry. Food service opportunities are available in hotels, attractions, and the travel industry. Much opportunity for part-time work and flexibility.

	Job Title	Job Description	Average Yearly Salary	Education Requirements
NOW	Host/Hostess, HD Maitre d', Restaurant Attendant	Welcomes & seats patrons, provides menus. Inspects dining room & tables for neatness and cleanliness. Ensures guests receive prompt, courteous service.	\$15,149-17,113	OJT HS Diploma Preferred
	Hotel/Motel Clerk, HD Receptionist,	Registers arriving guests, assigns rooms, and checks guests out.	\$15,380-19,619	OJT HS Diploma
	Gaming Change Persons, Booth Cashiers, HD	Exchanges money for tokens. Issues payoffs, gets customer's signature on receipt. Operates booth in slot machine area, furnishes change, or counts and makes sure the right amount of money is in drawers.	\$15,407-23,858	OJT HS Diploma
	Recreation/ Amusement Attendant – HD, Caddie	Sells tickets, rents or sells equipment. Collects fees & informs players of rules.	\$15,929-25,850	HS Diploma
NEXT	Coach, Professional Sports Scout	Instructs and prepares athletes for competition. Oversees the daily practice of players. Determines strategy during games and calls plays.	\$44,500	2-year degree
	Chef , Cruise Ship Chef, Pastry Chef	Plans meals, develops menus/recipes, prepares, and cooks foods.	\$46,900	2-year degree
	Food Services Manager – Cafeteria Manager, Food Services Director	Manages restaurants and cafeterias. Estimates food consumption, orders, and schedules delivery of food and beverages.	\$55,100	2-year degree OJT or HS Diploma
	Hotel/Motel Manager – Hospitality Manager, Front Office Manager	Coordinates front office activities for hotel/ motel. Establishes standards for service to guests, decor, housekeeping, food quality, & banquet operations.	\$60,800	2-year degree OJT or HS Diploma
	Professional Athlete	Participates in professional competitive athletic events to entertain sports fans.	\$55,900 *N/A for ND	Varies
	Restaurant Cook - Short Order Cook, Fast-Food Cook	Prepares & seasons soups, meats, vegetables, desserts, & other foods in restaurants. May supervise kitchen help, keeps records, & prices items on menu.	\$15,636-24,897	up to 2 years of post-secondary education beyond HS
	Travel Agent – Reservations and Ticket Agent, Travel Guide	Plans trips for customers. May specialize in foreign, U.S, individual, group, certain geographical areas, and/or airplane charters, or package tours.	\$17,500-25,922	2-year degree
LATER	Meetings and Convention Planner – Hotel/Motel Manager	Organizes group meetings, conferences, and conventions. Makes sure activities and times work smoothly together.	\$24,273-43,775	4-year degree

*Salary information not available for ND because of the small numbers of professional athletes in the state.

Human Services

Work in this field takes place in offices, hospitals, clinics, and religious organizations. You also have the option of working at a private agency or being employed by state or local government. Work hours can be irregular, but the reward you get from helping people is well worth your time.

	Job Title	Job Description	Average Yearly Salary	Education Requirements
NOW	Nanny, HD Child Care Aide/Worker, Nursery School Attendant,	Cares for children. Duties may include feeding, play activities and outings, discipline, and driving children to activities.	\$15,299-18,505	OJT HS Diploma Preferred
NEXT	Personal and Home Care Aide, HD Personal Attendant, Blind Aide	Helps elderly, disabled, and ill people live in their own homes instead of in a nursing home, hospital, etc. Helps clients move from bed, bathe, dress, and groom selves.	\$19,489-30,358	2-year degree Preferred
	Social Service Assistant, HD Social Services Aide, Food Management Aide	Arranges transportation and activities for clients. Goes with clients to group meal sites, adult daycare programs, recreation programs, and/or doctors' offices.	\$19,489-\$30,358	2-year degree Preferred
LATER	Clergy – Minister, Priest, Mullah, Rabbi	Ministers to the spiritual needs of people. Leads religious services. Performs wedding and funeral ceremonies	\$23,003-44,884	4-year degree
	Clinical Psychologist, School Psychologist, Counseling Psychologist	Studies the way people behave. Provides mental health services in private settings, hospitals, clinics, and schools.	\$31,944-65,655	Doctoral degree License, internship required
	Social Worker –Substance Abuse Counselor	Helps people with mental or emotional problems. Provides therapy, outreach programs, and extra help in times of crisis.	\$28,531-41,764	4 years degree Master's degree Licensed
	Mental Health Counselor	Works with individuals and groups to promote mental health. Helps people with substance abuse, family, parenting, suicide, stress issues; problems with self-esteem.	\$33,346-72,092	4 year degree and sometimes work experience. Master's degree Licensed
	Parole and Probation Officer	Makes release plans for prisoners and works with them after release. Investigates of juvenile and adult offenders. Helps prisoners return to normal life.	\$32,926-46,836	4-year degree
	Social Worker, Casework Supervisor, Social Group Worker	Helps individuals and families deal with problems. Checks to see if people meet requirements for helping programs, and visits clients on a regular basis.	\$28,531-41,764	4 year degree sometimes work experience Masters Degree
	Vocational Rehabilitation Counselor	Helps people cope with disabilities resulting from birth defects, illness, disease, accidents, or stress. Helps people get education, training, and equipment needed for employment.	\$21,179-40,874	4 years degree and sometimes work experience. (Masters Degree)

Information Technology

If you are the type of person who wants the latest computer gadget or wants to know just how computers think and work, information technology is for you. With advances in technology happening every day, it stays exciting. From designing software and video games to repairing computers, this field continues to grow.

	Job Title	Job Description	Average Yearly Salary	Education Requirements
NOW	Coin and Vending Machine Repairer	Installs, services, adjusts, and repairs coin or vending machines. Also cleans and oils machines; fills machines with products, money, and other supplies.	\$21,997- 43,761	HS Diploma
NEXT	Cartoon/Computer Animator Computer Game Designer	Draws by hand and uses computers to create a series of pictures that will be used in an animated cartoon.	\$50/foot of film or up to \$1500/week	2-year degree
	Computer Equipment Repairer, Office Machine Repairer, Electronics Mechanic	Repairs, takes care of, and installs computer equipment of all kinds. Talks about equipment problems with customers and runs tests.	\$46,211-47,529	2-year degree
	Computer Support Specialist, Technical Support Specialist, Network Control Supervisor	Investigates and solves problems that people have with their computers. Gives technical advice to coworkers to in solving problems.	\$23,967-44,035	2-year degree
LATER	Computer Programmer, Webmaster	Develops/ writes computer programs by changing information into “coded” computer language.	\$34,445-58,733	4-year degree
	Computer Systems Analyst, Quality Assurance Analyst, Computer Programmer-Analyst	Looks at problems and figures out the right computer programs and operating systems for businesses.	\$42,814-72,107	4-year degree
	Computer Hardware Engineer	Designs, develops, and tests computer equipment.	\$68,049-99,023	4 year degree sometimes work experience
	Information Systems Manager, Information Processing Manager, Computer Operations Manager	Helps businesses plan how to use technology. Manages engineers, technicians, and computer specialists.	\$53,696-93,151	4-year degree work experience
	Information base Administrator, Information Base Design Analyst, Information Scientist	Manages computer information bases. May plan firewalls and security systems.	\$49,993-71,734	4-year degree

Law, Public Safety, Corrections & Security

Open up your own law firm or work as part of a local, state, or federal government. This career field can offer you many different opportunities with exciting tasks. You can work outside fighting fires or inside a courtroom defending a client.

	Job Title	Job Description	Average Yearly Salary	Education Requirements
NOW	Court Clerk, Courtroom Clerk, Records Clerk	Performs secretarial duties in a court of law. Prepares calendar of cases for judges. Contacts witnesses, attorneys, and people involved in lawsuits. Keeps records.	\$23,054-33,866	OJT or HS Diploma
	Correctional Officer, HD Jailer	Keeps order within jail, watches inmates, and enforces rules; searches inmates and their cells for weapons, drugs, or fire hazards.	\$24,656-36,137	OJT HS Diploma
	Emergency Vehicles Dispatcher HD	Takes calls from public. Questions callers about the type and location of emergency. Sends police, fire, or ambulance units.	\$26,831-43,488	OJT HS Diploma
	Fire Fighter, Forest Fire Fighter	Works as a member of a team to control & put out fires, protect lives and property from fires. Rescues victims.	\$31,133-49,127	OJT HS Diploma Competency exam
	Fire Investigator, Fire Inspector, Arson Investigator	Analyzes evidence and information to determine causes of fires or explosions. Testifies in court cases; swears out warrants for suspected arsonists.	\$24,125-43,115	HS Diploma Experience
NEXT	Private Investigator, Deputy US Marshall, Security Guard	Gathers evidence for divorce, child custody, and missing persons cases. Examines crime scenes for clues; identifies-catches suspects, & turns them over to authorities.	\$39,121-69,182	Work experience in related occupation
	Court Reporter, Shorthand Reporter, Stenographer	Uses a stenotype machine to take dictation of letters, reports, or statements made in court. Transcribes word-for-word reports.	\$25,963-47,434	2-year degree
	Legal Technician (Paralegal) Legal Investigator	Researches legal cases, investigates facts, & prepares legal documents for lawyers.	\$28,484-44,890	2-year degree
	Police Patrol Officer HD – Border Guard, State Highway Patrol Officer	Enforces laws to protect life and property. Catches criminals, collects evidence, and gives testimony in court. Directs traffic, issues traffic tickets, and makes arrests.	\$31,181-48,391	2-year degree police academy 4-year degree
LATER	Fish and Game Warden , Fish and Game Biologist	Patrols assigned area to enforce fish and game laws. Investigates reports of damage to crops or property by wildlife and/or public.	\$32,058-53,234	4-year degree and sometimes work experience.
	FBI Agent Homeland Security Agent	Investigates white-collar, organized, and violent crimes. Investigates terrorist activities.	\$43,705-119,000	4-year degree FBI Academy
	Lawyer, HD District Attorney, Public Defender	Advises individuals and businesses on legal matters. Talks with clients to decide the details of their problem, advises them of the law, and suggests action.	\$49,507-117,839	4-year degree Law Degree (additional 3 yrs) License required

Manufacturing

Assembling products and operating machines is what it's all about. You can work in a big factory operating a textile machine or install the electronics system on an airplane. While some employers allow you to learn through OJT (on-the-job-training) - a high school diploma is preferred. The growth of technology in factories increases the call for workers who have technical skills.

	Job Title	Job Description	Average Yearly Salary	Education Requirements
NOW	Electric Meter Installer/Repairer	Installs, tests, and repairs electric meters. Connects or disconnects service connections.	\$35,597-62,189	OJT HS Diploma Preferred
	Purchasing Agent, HD Manager, Buyer	Purchases goods and services for a company.	\$36,816-64,992	OJT HS Diploma
NEXT	Civil Engineering Tech, HD Facilities Planner, Parking Analyst	Helps civil engineers plan and construct highways, bridges, buildings, and other structures. Prepares drawings and does land-surveying duties on work sites.	\$30,420-45,840	2-year degree
	Electronic Engineering Technician, Electronics Microelectronics Technician	Works with electrical engineers to help design and develop electronic equipment. Tests and repairs equipment.	\$35,863-59,375	2-year degree
	Electrical/Electronics Repair, Field Service Engineer, Avionics Technician	Installs, tests, repairs, and services electronic equipment, Uses testing equipment to find problems. Figures out wiring diagrams to trace and connect wires.	\$38,654-50,400	2-year degree
	Industrial Machinery Mechanic, HD Hydraulic Repairer	Takes care of and repairs engines, motors, pneumatic (air-filled) tools, conveyor belts, and manufacturing equipment.	\$33,644-57,062	2-year degree
	Machinery Maintenance Worker Overhead Cleaner Maintainer	Does routine maintenance, cleaning, and overhaul of manufacturing machinery. Changes parts such as blades, rollers, or bearings.	\$34,248-51,898	2-year degree OJT HS Diploma Preferred
	Machinist, Automotive, Machinist, Gunsmith	Sets up and operates computerized machine tools. Uses drawings to make or repair metal parts Checks work with precision measuring tools, such as micrometers and calipers.	\$28,999-45,403	2 years degree *Apprenticeship
	Mechanical Engineering Technician, Aerospace Engineering Technician, Heat-Transfer Technician	Helps mechanical engineers design, develop, test, and build machinery or mechanical parts. Makes a sketch of how to put it together and what it looks like.	\$36,521-58,433	2 years degree Apprenticeship
LATER	Welder/Cutter, Pipefitter	Welds and repairs metal and plastic. Joins pipes in refineries, power plants, and oilfield. Repairs heavy equipment.	\$26,514-40,827	2 year degree OJT
	Quality Assurance Engineer	Conducts experiments to see if a company is operating well. Must understand statistics. Computer use, attention to detail, good oral and written skills are important.	\$50,000-\$52,000 US average	4-year degree Master's degree

*Apprenticeship is a structured learning program that generally involves a specific number of classroom hours, on-the-job training and work experience in order to obtain a "license."

Marketing

How are your communication skills? Are you good at promoting products and services? Occupations in this cluster give you a wide range of choices. You can do many things from floral designing to selling real estate.

	Job Title	Job Description	Average Yearly Salary	Education Requirements
NOW	Advertising Sales Agent, Radio and Television Time Salesperson,	Sells advertising such as artwork for ads, time on radio and TV, or space in papers.	\$22,762-54,473 annual	OJT HS Diploma Preferred
	Driver/Sales Worker, HD Lunch Truck Driver, Newspaper Delivery Driver	Drives over assigned routes to deliver and sell goods to stores or businesses.	\$15,862-30,507	Special driver's license required
	Retail Sales Person, HD Layaway Clerk, Books Salesperson	Sells a variety of products to customers in stores, makes change, and bags purchases.	\$15,862-30,507	OJT HS Diploma Preferred
	Floral Designer/Florist	Cuts and arranges fresh, dried, or artificial flowers. Works from a customer's order stating type of arrangement, colors, price, and the date and place to be delivered.	\$16,560-22,670	OJT HS Diploma Preferred
NEXT	First-Line Supervisors, HD Barber Shop Manager; Health Club Manager	Supervises personal service workers, such as flight attendants, hairdressers, or athletic trainers.	\$26,813-47,623	Work experience in related occupation
	Hairdresser/Cosmetologist, Manicurist, Barber	Shampoos, cuts, and styles hair, wigs or hairpieces; advises on hair care & use of make-up.	\$16,399-26,718	2-year degree License required
	Wholesale and Retail Buyer, Department Store Buyer, Fashion Buyer	Buys goods for resale in stores. Visits showrooms to select merchandise. Uses computers to get up-to-date price listings, track inventory, and process orders.	\$48,200-63,200	2-year degree
	Interior Designer, HD Graphic Designer, Set and Exhibit Designer	Designs interiors of homes, business offices, etc. Develops plans and drawings for furnishings and lighting.	\$29,822-43,556	2-year degree
LATER	Marketing Manager, HD Media Marketing Director, Fashion Coordinator	Determines demand and sale of products and services; identifies potential customers. Determines the need for advertising.	\$45,967-98,661	4 year degree or work experience
	Loan Counselor, Farm Mortgage Agent	Helps borrowers gather financial information and fill out loan applications. Evaluates and recommends approval of loans.	\$30,227-47,938	4 year degree
	Market Research Analyst	Researches market conditions to determine potential sales of a product or service. May use survey results to create a marketing campaign.	\$37,422-\$71,131	4 year degree and sometimes work experience

Science, Technology, Engineering & Mathematics

Would you like to work in a laboratory with bubbling beakers and test tubes? If you like doing your annual science fair project, this career field may be right up your alley. Theories, hypotheses, and mathematical skills are all part of the job.

	Job Title	Job Description	Average Yearly Salary	Education Requirements
NEXT	Chemical Technician, Laboratory Technician, Laboratory Tester	Helps chemists develop and use chemicals and equipment. Tests strength or quality of such products as foods, fertilizer, detergents, or paper.	\$18,111-28,592	2-year degree
	Forensic Science Technician, Forensic Ballistics Expert	Studies DNA, blood splatter and other evidence to figure out ideas about criminals, victims and crime scenes.	\$27,897-49,678	2-year degree
	Surveying Technician, Chief, Instruments Surveyor Assistant	Uses measuring equipment (transit). Collects information outside. Does calculations and computer aided drafting.	\$21,478-57,886	2-year degree OJT or Apprenticeship
	Simulator Maintenance Technician	Troubleshoots, repairs, and maintains the electronic, visual, and mechanical components of simulator trainers use in pilot training.	\$38,00-45,000	2-year degree
LATER	Civil Engineer HD– Airport Engineer, Transportation Engineer	Plans and designs roads, airports, tunnels, bridges, etc. May specialize.	\$67,609-94,623	4-year degree License required
	Aerospace Engineer, Aerodynamicist, Aeronautical Design Engineer	Designs, develops, tests, aircraft, missiles, and spacecraft. Develops new technology for use in aircraft, defense systems, and space.	\$60,000-150,000	4-year degree Sometimes work experience. License required
	Chemist, Food Chemist, Laboratory Supervisor	Studies chemicals and chemical reactions to create new and improved products.	\$38,289-71,517	4-year degree and/or work experience
	Geoscientist, Hydrologist	Studies physical aspects of the earth, including the air and water.	\$42,224-76,821	4 year degree Master's degree
	Industrial Engineer	Figures out the best way to make a product (people, machines, materials, etc).	\$51,936-77,110	4 year degree Work experience.
	Mechanical Engineer, HD Mining Engineer, Wind Energy Systems Designer	Plans and designs machines such as engines and machines which use power. Tests equipment. Develops new methods.	\$47,825-78,809	4 year degree Work experience. License required
	Meteorologist – Weather Observer, Environmental Science Technician	Studies atmosphere to prepare weather reports & forecasts. Uses information from weather stations, balloon, satellites, Doppler radar, and observers.	\$34,309-67,452	4 year degree and sometimes work experience.

Transportation, Distribution & Logistics

Would you like getting people or products from one place to another by land, air, or sea? Check out these occupations.

	Job Title	Job Description	Average Yearly Salary	Education Requirements
NOW	Flight Attendant, Transportation Attendant, Ramp Flight Attendant	Takes care of passengers' comfort and safety on airplanes. Checks supplies and equipment and explains safety procedures.	\$16,000-75,000	HS Diploma and On-the-job airline training program
	Postal Mail Carrier – Rural Mail Carrier, Postal Service Clerk	Sorts mail for delivery and delivers mail along a route by vehicle or on foot.	\$35,115-55,900	HS Diploma
	Highway Maintenance Workers	Maintain highways, municipal and rural roads, airport runways, and rights-of-way. May also mow or clear brush from a long road or plow snow from roadway.	\$25,082-36,045	OJT HS Diploma Preferred
NEXT	Heavy Truck Driver HD – Tractor-Trailer-Truck Driver, Tow-Truck Operator	Drives trucks that weigh 3 tons or more to move freight from one place to another. Checks fuel, oil, brakes, lights, and safety equipment.	\$26,463-44,140	OJT HS Diploma Preferred *CDL License required
	Air Traffic Controller – Air Transportation Dispatcher, Chief Controller	Keeps track of planes flying in an assigned area to make sure that planes stay a safe distance apart. Gives pilots instructions during take-off and landing.	\$55,205-91,736	2-year degree Certification required
	Aircraft Mechanic – Aircraft Body Repairer, Airframe and Power Plant Mechanic	Inspects, repairs, and takes care of plane according to guidelines required by the government (**FAA).	\$33,124-54,765	2-year degree
	Aircraft Pilot/Flight Engineer	Flies airplanes and helicopters. Before leaving, talks with the airport and aviation weather forecasters to find out about weather on the route.		2-year degree OJT or HS Diploma Commercial Rating
	Automobile Mechanic HD– Transmission Mechanic, Brake Repairer	Takes care of and repairs vehicles. Gets a description of the problem, diagnoses the source of the problem, and makes adjustments or repairs.	\$19,318-38,271	2-year degree
	Automotive Body Repairer HD– Automotive Glass Installer/Repairer	Repairs and refinishes vehicle bodies. Straightens bent frames, smooths out dents and replaces parts that cannot be repaired.	\$23,434-41,686	2-year degree
	Diesel Engine Mechanic HD – Maintenance Mechanic, Industrial Truck Mechanic	Servises and repairs engines of industrial vehicles and machinery such as bus, truck, tractor, train, and boat engines. Reads job orders and manuals.	\$31,220-53,257	2-year degree
	Motorcycle Mechanic - Motorboat Mechanic, Small Engine Mechanic	Repairs motorcycles and similar small engines by fixing and replacing parts which aren't working.	\$19,570-33,116	2-year degree

*CDL means Commercial Drivers License

** FAA means Federal Aviation Administration

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